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Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* **4** : 51-56, 57-59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* **5** : 5-13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (vol. 6, Part 3) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission as quickly as possible and, in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

Notices prescribed by the International Congress of Zoology (*continued*)

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases

1. NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its plenary powers, is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the following names :—

(1) *Modiolus* Lamarck, 1799 (Class Pelecypoda), proposed designation of type species for (Z.N.(S.)213).

(2) *Hexarthra* Schmarda, 1854 (Class Rotifera), proposed variation of type species of, and suppression of the trivial name *polyptera* Schmarda, 1854, published in combination with that generic name (Z.N.(S.)340).

(3) *Trigonia* Bruguière, 1789 (Class Pelecypoda), proposed designation of type species for (Z.N.(S.)499).

(4) trivial name *caesius* Cloquet, 1818 (as published in the binominal combination *Coluber caesius*) (Class Reptilia, Order Squamata), proposed suppression of (Z.N.(S.)531).

2. Comments received in sufficient time will be published in the *Bulletin* ; other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part, will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the arrangement agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* **4** : 56) corresponding Notices have been sent to the journals " Nature " and " Science."

FRANCIS HEMMING,

Secretary to the International Commission on Zoological Nomenclature.

Secretariat of the
International Commission on
Zoological Nomenclature,
28, Park Village East, Regent's Park,
LONDON, N.W.1, England.

28*th September* 1951.

PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE GENERIC NAME "MODIOLUS" LAMARCK, 1799, BY SUPPRESSING THE GENERIC NAME "VOLSELLA" SCOPOLI, 1777 (CLASS PELECYPODA) AND MATTERS INCIDENTAL THERETO

By JOSHUA L. BAILY, Jr.,
(*San Diego, California, U.S.A.*)

(Commission's reference Z.N.(S.)213)

1. The object of the present application is to ask the International Commission on Zoological Nomenclature to use its plenary powers to suppress the generic name *Volsella* Scopoli, 1777 (*Introd. Hist. nat.* : 397) (Class Pelecypoda) and thereby forestall the serious confusion which the resuscitation of this long-neglected name would inevitably cause. This confusion would be of a peculiarly aggravated character, for the acceptance of the name *Volsella* Scopoli, 1777, would not only lead to the disappearance into snynonymy of the well-known name *Modiolus* Lamarck, 1799 (*Mém. Soc. Hist. nat. Paris*, **1799** : 87) but would also make it necessary to employ in the Class Pelecypoda two generic names (*Volsella* Scopoli, 1777, and *Vulsella* Röding, 1798 (*Mus. bolten.* (2) : 156) so similar to one another that confusion would be quite unavoidable. This latter consideration is all the more important, in view of the fact that species of both these genera may occur in the same strata.

2. The genus *Modiolus* Lamarck, 1799, has, as its type species, *Mytilus modiolus* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) **1** : 706), by absolute tautonymy. The name *Modiolus* Lamarck has been in almost universal use for this genus for the past twenty-five years, while, prior to that, the same name in the invalid (because later published) variant form *Modiola* Lamarck, 1801 (*Syst. Anim. sans Vertèbr.* : 113) (with the same type species) had been in general use for upwards of a century. This name is therefore deeply entrenched in the literature and very well known to all students of this group. The abandonment of this name on no more than technical nomenclatorial grounds would therefore be open to very strong objection.

3. The name *Volsella* Scopoli, 1777, was published as the name of a genus to which three nominal species were assigned. The first of these species, *Mytilus modiolus* Linnaeus, 1758, was selected as the type species of this genus by Gray in 1847 (*Proc. zool. Soc. Lond.* **15** (178) : 198). The nominal genera *Volsella* Scopoli, 1777, and *Modiolus* Lamarck, 1798, are thus objectively identical with one another, each having the same species as its type species. The name *Modiolus* Lamarck is accordingly invalid, being a junior objective synonym of *Volsella* Scopoli, 1777.

4. In spite of the undoubted priority which it possesses over the name *Modiolus* Lamarck (and its variant *Modiola* Lamarck), the name *Volsella* Scopoli never

won any acceptance for itself, even after Gray (1847) had clearly defined the content of this genus by selecting a type species for it. Some authors rejected this name on the ground that in the *Introd. Hist. nat.*, in which it was first published Scopoli did not satisfy the requirements of Proviso (*b*) to Article 25 of the *Règles*, i.e. on the ground that in this work Scopoli did not apply the principles of (formerly " binary ", now) binominal nomenclature (see 1950, *Bull. zool. Nomencl.* **4** : 63-66) ; other authors have merely ignored the name *Volsella* Scopoli ; others again have argued that this generic name cannot properly be used for *Mytilus modiolus* Linnaeus, since the shell of that species has an edentulous hinge, although Scopoli erected the genus *Volsella* for the denticulate species placed by Linnaeus in his genus *Mytilus*, while leaving in that genus the edentulous species. Those authors who have advanced this argument have concluded either that Scopoli, when introducing his new genus *Volsella*, misidentified some other species with *Mytilus modiolus* Linnaeus, when he cited that species as belonging to his new genus or that, if Scopoli did not actually make a misidentification, he included the above species in *Volsella* in error through having misunderstood its characters.

5. Neither the foregoing argument against the acceptance of the generic name *Volsella* Scopoli, 1777, nor that against the acceptance of *Mytilus modiolus* Linnaeus, 1758, as the type species of that genus can be accepted as having any validity under the *Règles*. The first of these arguments is completely disposed of by the decision taken by the International Congress of Zoology in 1948, with reference to Brünnich's *Zoologiae Fundamenta* of 1771 (a work which, like Scopoli's *Introductio*, was primarily concerned with classification down to the genus level but no further) that a generic name published in such a work is not to be rejected on the ground that in it the author did not comply with the requirements of Proviso (*b*) to Article 25, provided that it is evident (as it is in the case both of Brünnich's and Scopoli's books) that the author concerned would have applied the principles of binominal nomenclature if in the book concerned he had dealt with taxonomic units below the genus level (1950, *Bull. zool. Nomencl.* **4** : 307-310). The second of the arguments discussed above is shown to be fallacious by the decision taken by the Congress that the original author of a genus is to be deemed to have correctly identified the species referred by him thereto, except where the International Commission is satisfied that an error of identification was committed by the original author of the genus and is of the opinion that greater confusion than uniformity would result if the species represented by the nominal species in question were to be accepted as the type species of the genus (1950, *Bull. zool. Nomencl.* **4** : 158-159).

6. It is clear therefore that, as argued by Dr. Ralph B. Stewart in 1939 (*Acad. nat. Sci. Philad. Spec. Publ.* **3** : 98), no technical objection can be established against the name *Volsella* Scopoli, 1777, and in consequence that, as that nominal genus has the same type species (*Mytilus modiolus* Linnaeus, 1758) as the nominal genus *Modiolus* Lamarck, 1798, it must, under the *Reglès*, replace the name *Modiolus* Lamarck. It does not follow however from this conclusion that the use of the name *Modiolus* Lamarck must be abandoned in favour of the long-neglected and confusing name *Volsella* Scopoli, 1777, for ever since 1913 the International Commission on Zoological Nomenclature has

been clothed by the International Congress of Zoology with plenary powers to suspend the operation of the normal Rules in case where it is satisfied that otherwise greater confusion than uniformity will result. For nearly forty years therefore there has been a means by which in cases of the foregoing type the strict application of the *Règles* may be officially waived. The position in this matter was emphasised in 1948 by the decision of the Congress to incorporate the provisions relating to the plenary powers into the *Règles* in the revision which it was then decided to make. For the reasons set out in the opening part of the present application the case now under consideration appears pre-eminently to be one which calls for action by the International Commission under its plenary powers, if far-reaching and, as regards the concurrent use of the names *Volsella* Scopoli and *Vulsella* Röding, permanent, confusion is to be avoided.

7. I accordingly ask the International Commission to use its plenary powers to validate the name *Modiolus* Lamarck, 1799, by suppressing the earlier name *Volsella* Scopoli, 1777. It is important that the suppression of the latter name should be limited to its status under the Law of Priority and should not extend to its status under the Law of Homonymy, since, if the name *Volsella* Scopoli, 1777, were to be suppressed for all purposes, the effect would be to render available as a generic name the word *Volsella* as from the next subsequent occasion on which it was published as the name of a new genus. It is particularly fortunate in the present case that the need for this distinction in those cases where the plenary powers are used solely for the purpose of validating some other name of later date has already been recognised by the International Congress of Zoology (1950, *Bull. zool. Nomencl.* **4** : 338-339), since otherwise the suppression of the name *Volsella* Scopoli, 1777, would have conferred availability upon the name *Volsella* Modeer, 1793 (*K. VetenskAkad. Nya. Handl.*, Stockholm **14** : 179), a name which is at present an invalid junior homonym the resuscitation of which would almost inevitably give rise to a fresh wave of confusion in some other direction.

8. Since part of the object of the present application is to protect the name *Vulsella* Röding, 1798 (a name commonly attributed to Bolten), from the confusion which would be inevitable if within the same Class there were to be also a valid generic name consisting of the word *Volsella* (*Volsella* Scopoli, 1777), it is desirable that the present opportunity should be taken to place the name *Vulsella* Röding, 1798, on the *Official List of Generic Names in Zoology*. The type-species of this nominal genus is *Mya vulsella* Linnaeus, 1758 (*Syst. Nat.* (ed.10) **1** : 671), by absolute tautonymy.

9. Under the procedural decisions taken by the International Congress of Zoology in 1948 (1950, *Bull. zool. Nomencl.* **4** : 269-271), the trivial names of the species which are respectively the type species of the genera *Modiolus* Lamarck, 1799, and of *Vulsella* Röding, 1798, should now be placed on the *Official List of Specific Trivial Names in Zoology*, as each of these names is considered by specialists to be the oldest available name for the species in question.

10. Finally, the decision taken by the International Commission on Zoological Nomenclature at its Session held in Paris in 1948 that in future each *Opinion* rendered is to deal with all aspects of the problem submitted (1950, *Bull. zool. Nomencl.* **4** : 355) will make it necessary that in the *Opinion* to be rendered in the present case certain names which are either junior homonyms of, or are junior objective synonyms of, names now proposed to be placed on the *Official List of Generic Names in Zoology* should be finally disposed of by being placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

11. The proposal which I now submit is therefore that the International on Zoological Nomenclature should :—

(1) use its plenary powers :—

(*a*) to suppress for the purposes of the Law of Priority but not for the purposes of the Law of Homonymy the generic name *Volsella* Scopoli, 1777, and

(*b*) to validate the name *Modiolus* Lamarck, 1799 ;

(2) place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

(*a*) *Modiolus* Lamarck, 1799, as proposed under (1)(*b*) above, to be validated under the plenary powers (type species, by absolute tautonymy : *Mytilus modiolus* Linnaeus, 1758) ;

(*b*) *Vulsella* Röding, 1798 (type species, by absolute tautonymy : *Mya vulsella* Linnaeus, 1758) ;

(3) place the under-mentioned generic, or reputed generic, names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

(*a*) *Modiola* Lamarck, 1801 (a junior objective synonym of *Modiolus* Lamarck, 1798) ;

(*b*) *Volsella* Scopoli, 1777 (proposed, under (1)(*a*) above, to be suppressed under the plenary powers for the purposes of the Law of Priority but not for the purposes of the Law of Homonymy) ;

(*c*) *Volsella* Modeer, 1793 (a junior homonym of *Volsella* Scopoli, 1777) ;

(*d*) *Vulsella* [Humphreys], 1797, *Mus. calonn.* : 44 (a name published in a book rejected for nomenclatorial purposes under *Opinion* 51) ;

(*e*) *Vulsella* Lamarck, 1799, *Mém. Soc. Hist. nat. Paris* **1799** : 82 (a junior homonym of *Vulsella* Röding, 1798) ;

(4) place the under-mentioned trivial names on the *Official List of Specific Trivial Names in Zoology* :—

(*a*) *modiolus* Linnaeus, 1758 (as published in the binominal combination *Mytilus modiolus*) (trivial name of the type species of *Modiolus* Lamarck, 1799) ;

(*b*) *vulsella* Linnaeus, 1758 (as published in the binominal combination *Mya vulsella*) (trivial name of the type species of *Vulsella* Röding, 1798).

12. I should like, if I may, to express the hope that it will be possible for the International Commission on Zoological Nomenclature to reach a decision on the present application at a very early date, for the genera the names of which form the subject of this application will certainly appear in the forthcoming *Treatise on Invertebrate Paleontology*, which will inevitably be a standard work for many years to come and in which therefore it is particularly desirable that the nomenclature employed should be both correct under the *Règles* and also in harmony with established usage.

SUPPORT FOR MR. JOSHUA L. BAILY'S PROPOSAL THAT THE PLENARY POWERS SHOULD BE USED TO SUPPRESS THE GENERIC NAME "VOLSELLA" SCOPOLI, 1777, FOR THE PURPOSE OF VALIDATING THE GENERIC NAME "MODIOLUS" LAMARCK, 1799 (CLASS PELECYPODA)

By L. R. COX, Sc.D., F.R.S.

(*Department of Geology, British Museum* (*Natural History*), *London*)

(Commission's reference Z.N.(S.)213)

(Enclosure to a letter dated 21st March 1951)

I strongly support Mr. Joshua L. Baily's application for the suppression of the generic name *Volsella* Scopoli, 1777, for the following reasons.

1. The name has been adopted by only a small handful of authors in comparison with the many who have employed the name *Modiola* Lamarck, 1801, or *Modiolus* Lamarck, 1799, for the genus typified by the well-known living mussel *Mytilus modiolus* Linneaus, 1758. This is a most important group both for palaeontologists and neontologists and it is desirable that the name by which it has long been known (whether in the form *Modiola* or the slightly earlier form *Modiolus*) should be stabilized.

2. Scopoli referred three species to *Volsella* when founding the genus, but, of these, *Mytilus modiolus* Linnaeus was the only nominal species, the other two being cited by the pre-Linnean names "Gula Soricis Lister" and "Mytilus L. Aber Adans." *M. modiolus* is thus type species of *Volsella* by monotypy. It is, however, evident that Scopoli based his conception of this species on wrongly determined specimens.

Mytilus modiolus and all species which have been referred to *Modiolus* [vel *Modiola*] differ from *Mytilus* s.str. (type species *Mytilus edulis* Linnaeus, 1758) in the absence of hinge-teeth. Scopoli, however, divided his Gens Bivalvia into two groups. " Distributio I " and " Distributio II ", the former characterized as " cardine edentato " and the latter as " cardine dentato ". He included the genus *Mytilus* (of which he cited no species) in the former and *Volsella* in the latter. Moreover, the generic diagnosis of *Volsella* states " cardo . . . terminant denticuli exigui ", and *Mytilus modiolus* Linnaeus, is described by Scopoli as " dente unico ". Scopoli's whole treatment of these mussels is, therefore, most confused, and it seems obvious that he did not intend to apply the name *Volsella* to the group familiarly known as *Modiolus* or *Modiola*.

3. *Vulsella* is a very familiar name for a genus of Tertiary and living pelecypods and a family name VULSELLIDAE is derived from it; it is highly desirable that it should be stabilized and placed on the *Official List of Generic Names*.

SUPPORT FOR THE PROPOSALS RELATING TO THE GENERIC NAMES " CRANGON " FABRICIUS, 1798, " CARCINUS " LEACH, 1814, AND " SCYLLARIDES " GILL, 1898 (CLASS CRUSTACEA) SUBMITTED BY DR. L. B. HOLTHUIS

By RICARDO ZARIQUIEY
(*Enfermedades de la Infancia, Barcelona, Spain*)

(Commission's reference Z.N.(S.)231, 209, 473)

(Letter dated 25th July 1951)

Estudiadas detenidamente las propuestas Z.N.(S.)231 sobre el uso de los nombres genéricos *Crangon* Fabricius, 1798, y *Alpheus* Fabricius, 1798, la Z.N.(S.)209 sobre el uso del nombre genérico *Carcinus* Leach, 1814, y la Z.N.(S.) 473 sobre el nombre genérico *Scyllarides* Gill, 1898, debo manifestarle que estoy de acuerdo con las conclusiones de las mismas y que Voto " SI " a lo que propone el Dr. L. R. Holthuis, ponente de las mismas.

APPLICATION FOR THE STABILISATION OF THE NAME FOR THE GENUS OF THE CLASS ROTIFERA FORMERLY KNOWN AS " PEDALION " HUDSON, 1871, OR " PEDALIA " BARROIS, 1878, INCLUDING A REQUEST FOR THE USE OF THE PLENARY POWERS TO VARY THE TYPE SPECIES OF THE GENUS " HEXARTHRA " SCHMARDA, 1854, AND TO SUPPRESS THE TRIVIAL NAME " POLYPTERA " SCHMARDA, 1854, PUBLISHED IN COMBINATION WITH THAT GENERIC NAME, AND MATTERS INCIDENTAL THERETO

By G. M. NEAL

(*Department of Zoology, University of Toronto, Canada*)

(Commission's reference Z.N.(S.)340)

1. The object of the present application is to invite the International Commission on Zoological Nomenclature to use its plenary powers to stabilise the name for the genus of the Class Rotifera formerly known as *Pedalion* Hudson, 1871, or as *Pedalia* Barrois, 1878, by designating a recognisable species to be the type species of the genus *Hexarthra* Schmarda, 1854. The facts of this rather complicated case are set out in the following paragraphs.

2. The generic name *Pedalion* Hudson, 1871 (*Mon. microscop. J.* **6** : 121, pl. 94) was established for a monotypical genus for a new species then named *Pedalion mira*. The name *Pedalion* Hudson, 1871, is invalid, because it is a junior homonym both of *Pedalion* Dillwyn, 1817 (*Descr. Cat. Shells* : 282) and of *Pedalion* Swainson, 1838 (*Nat. Hist. Fishes* **1** : 199). It will be convenient if, before considering whether there is any subjectively identical nominal genus, the name of which should replace the invalid name *Pedalion* Hudson, 1871, we examine briefly the subsequent history of Hudson's name *Pedalion*.

3. In 1877 Barrois gave a paper at the Sixth Session of the " Association française pour l'Advancement des Sciences " held at Le Havre, entitled : " Sur l'anatomie et le developpement du *Pedalia mira* ". This paper was published in 1878. Although, as noted above, the generic name was written in the form *Pedalia* in the title of Barrois ' paper, that name appeared in the form *Pedalion* at every point at which it appeared in the body of that paper. Rousselet in 1914 (*Association française pour l'Avancement des Sciences, 43e Session, Le Havre, C. R.* : 535-536) drew attention to this inconsistency and raised the question whether it was due to an editorial error or whether it should be explained on the ground that Barrois was aware of the fact that the name *Pedalion* Hudson, 1871, was invalid and tried to get over this difficulty by substituting the variant form *Pedalia* in the title of his paper. It must be noted however that an abstract of this paper of Barrois' was published in the issue of the *Revue scientifique* of 29th September 1877, and that in this paper

only the spelling *Pedalion* occurs. In this abstract no title was given for this paper and it possible that it is for this reason that the spelling *Pedalia* did not appear on this occasion, for (as noted above) it was only in the title of Barrois' paper that the spelling *Pedalia* was used. It may be noted incidentally at this point that the species dealt with by Barrois in the foregoing paper is not only not (as he supposed) the species which in 1871 Hudson had named *Pedalion mira*; it is not even referrable to the same genus; it is actually a marine species of the genus *Synchaeta* Ehrenberg, [1832] (*Abh. preuss. Akad. Wiss.* **1831** : 135).

4. Since 1913 the genus named *Pedalion* by Hudson has been called both by that name and by the reputed name *Pedalia* Barrois, 1878, the latter having even made its way into Neave's *Nomenclator zoologicus* (**3** : 632), where it is quoted as a substitute name for *Pedalion* Hudson, 1871, the reference being given as " *Pedalia* Barrois, 1878, *C. R. Ass. Franc.* **6**(1877 Le Havre), 661 ".

5. I am bound to say that, in my view, it is impossible to accept, as a valid substitute name, a name (such as *Pedalia*) which appears only in the title of a paper, the correct spelling (in this case, *Pedalion*) occurring at every point in the body of the paper itself, where, if Barrois had intended to emend Hudson's name *Pedalion* in this way, he would certainly have used the spelling " *Pedalia* ". It is clear, however, that no progress can be made in the stabilisation of the name of this important genus until this preliminary question has been disposed of. I accordingly ask the International Commission on Zoological Nomenclature to give a ruling that the use of the word *Pedalia* in the title (but not in the text) of Barrois' paper does not constitute the publication of a generic name consisting of this word, the spelling " Pedalia " being due, it must be concluded, to some inadvertence on the part of the editor of Barrois' paper or on that of the printer.

6. It is necessary now to consider whether there is any nominal genus possessing a valid name, the type species of which can be regarded as belonging to the genus *Pedalion* (or *Pedalia*) as hitherto understood. An examination of the literature shows that there is such a nominal genus, which does, or may, satisfy this condition. This is the genus *Hexarthra* Schmarda, 1854 (*Denskr. Acad. Wiss. Wien* (Math.—natur. Kl.) **7** (No. 2) : 15). This genus in monotypical, its sole species being *Hexarthra polyptera* Schmarda, 1854, a then newly described (: 15) nominal species. This species is therefore the type species of the genus *Hexarthra* Schmarda by monotypy.

7. Our next step must be to consider the claims of the nominal species *Hexarthra polyptera* Schmarda to be regarded as representing a species of *Pedalion* (or *Pedalia*). The specimen upon which Schmarda based his description and figures of this nominal species, which was hardly visible to the naked eye, was discovered by him in a pool at El Kab in Egypt. At first Schmarda mistook this animal for a crustacean larva, but the " Raderorgan " and jaws showed that it was a Rotifer. The jaws had seven teeth on each side. Schmarda's type specimen is missing, and the species which he described has not been reported by any subsequent worker.

8. In drawing up his description and preparing his figures of this species, Schmarda was severely handicapped by reason of the fact that he was working under field conditions and had no opportunity for studying the animal at leisure. This stand is taken also by Daday, 1903 (Mikroskopische Süsswassertiere aus Kleinasien. *Wien. Sitzungsber.* (Math.-Natur. Kl) **112** (Abth. 1) : 139-168). When after the publication of the name *Pedalion*, the view was advanced that the genus so named was indistinguishable taxonomically from the genus *Hexarthra* Schmarda, Hudson objected on the ground that Schmarda had described the six plumose appendages as originating from the ventral side, as in a nauplius larva, while in his genus *Pedalion* these appendages were arranged around the animal. Hudson admitted, however, the difficulty of studying the arrangement of the hairs on the appendages of *Pedalion* species, a difficulty which may be illustrated by the mistakes which he himself made in some of his own figures and descriptions.

9. Daday (1886, Morph. Physiolog. Beiträge zur Kenntniss der *Hexarthra polyptera* Schmarda. *Termeszetraize Füzetek* **10** : 214-249, pls. VIII, IX) believed that, in representing the appendages of *Hexarthra polyptera* as arising from the ventral side of the animal, Schmarda had been influenced by the apparent similarity between members of the genus *Pedalion* and the nauplius larva of Crustacea, a resemblance which, though apparent at first glance, is found on closer examination to be entirely superficial in character.

10. Levander (1894, Beiträge zur Kenntniss der *Pedalion* Arten mit einer Tafel. *Soc. Faun. Flor. fenn.* **11** : 1-34, figs. 1, 2, 3) considered that, if one were to identify *Pedalion* with *Hexarthra*, it would be necessary to attribute to Schmarda a lack of observation which, in his view, there was no ground for assuming. Levander quoted the opinion of Plate—that, if Schmarda could show (as he did) the arrangement of the hairs on the appendages (which in *Pedalion* are found only on the ventral appendage) and the number of teeth in the jaws, he could not possibly have made the mistake of representing appendages as arising from the ventral side of the animal instead of being arranged in a circle around it. Plate concluded that, in view of these facts, the presence of hooks on appendages other than the ventral appendage, and the origin of the appendages from the ventral side of the animal, it was impossible to synonymise *Hexarthra* with *Pedalion*. As regards Plate's comment on these lateral hooks on the appendages, it is, however, worth noting that Daday recorded the presence of similar hooks on the dorsal appendage in his figure of his *Pedalion mucronatum* Daday, 1909 (*Trav. Soc. Nat. Petersb.* **39** : 9-38, pl. 1, figs. 2-6), a nominal species which has been identified with *Pedalion oxyure* Sernov, 1903 (*Turkestanskago Otd. imp. russ. georgr. Obsch.* **4** (Pt. 3) : 9, pl. 1, figs. 2, 3), in the figures of which no lateral hooks are shown on the dorsal appendage. This difference between the illustrations given by Sernov and Daday, to which attention has not so far been drawn, has not prevented authors from accepting *Pedalion mucronatum* Daday and *Pedalion oxyure* Sernov as being no more than different names for a single species. I have never noted lateral hooks on any but the ventral appendage. Daday's (1909) representation of hooks on the dorsal appendage may be due to incorrect interpretation. (See below).

11. Thus against the view that *Hexarthra polyptera* Schmarda is a species of the genus that Hudson named *Pedalion* is the observation by Schmarda that the appendages arise from the ventral surface and that there are lateral hooks on appendages other than the ventral appendage. As already noted however Daday himself showed incorrectly the presence of such hooks in his *P. mucronatum* (=*P. oxyure* Sernov). It must be noted also that at times the fold of the integument on the appendages can give a somewhat laddered appearance which under low magnifications may be mistaken for hooks. The presence of jaws in *H. polyptera* speaks for its being a rotifer. In view of the absence of posterior digitiform appendages posteriorly (such as are found in *Pedalion mira* Hudson), Schmarda's species might well belong to the *fennicum*-group of the genus *Pedalion*. The arrangement of the hairs on the appendages is very similar to that found in a species of *Pedalion* which occurs in the Saskatchewan lakes of Canada. The principal objection to the acceptance of Schmarda's species as belonging to the genus *Pedalion* is therefore his statement that the appendages come from the ventral side of the animal. As regards this, it must be noted, however, that a similar appearance can be obtained by placing a specimen of an undoubted species of *Pedalion* under a cover slip, the weight of which has flattened the animal (Schmarda's figure seems to have been drawn from a flattened specimen); unless one constantly alters the focus while drawing the animal as a whole or one of its appendages in order to obtain the correct relation, it is very easy to arrive at the same conclusion as that reached by Schmarda. An inaccuracy of this kind on the part of Schmarda would not be surprising if we recall the difficulties with which he was faced, by reason of having to examine his material in the field instead of in a laboratory.

12. The next point which it is important to note is that Schmarda found his species *Hexarthra polyptera* in abundance in the waters which he examined. This fact suggests that that species, whatever it was, would have been found again by subsequent workers. The species *Pedalia fennicum* Levander, 1892 (*Zool. Anz.* **15**: 403) has, in fact, been reported from North Africa, where it appears to be rather widely distributed. Recent observations show that this species shows considerable variation in the arrangement of the hairs and some variation in the tooth formula—a fact which may account, in part, for some of the special features shown in Schmarda's figures. Further, Bryce in his paper on the Rotifera of Devil and Stump Lakes (1924, *J. Quekett microscop. Club* **15**: 81-108) mentioned having examined a slide of *Pedalia* from El Kab (the type locality of Schmarda's species) that had been prepared by Rousselet. I have myself examined a slide of a specimen from this locality that was bought from Rousselet by the United States National Museum. The specimen mounted on this slide is a *Pedalion*.

13. The conclusion which I draw from an examination of Schmarda's (admittedly poor) description and figure is that the species which he described as *Hexarthra polyptera* belongs to Hudson's genus *Pedalion*. This conclusion becomes a virtual certainty, now that we have an actual specimen of a *Pedalion* from the very pond in which Schmarda took his *polyptera* but in spite of the abundance of that species noted by Schmarda no specimen of a species belonging to a separate genus recognisable from Schmarda's description as *Hexarthra*

is known from that very restricted locality. Schmarda's description of the arrangement of the hairs on the ventral appendages, the number of hooks on the ventral appendage that he noted, as also the number of teeth (seven) in each uncus, all place the animal described by Schmarda in the *fennicum*-group of the genus *Pedalion*.

14. In the light of the foregoing considerations, I reach the conclusion that the nominal genera *Hexarthra* Schmarda, 1854, and *Pedalion* Hudson, 1871, must, on taxonomic grounds, be regarded as subjectively identical with one another. Accordingly, the name which under the Code should be applied to this genus is *Hexarthra* Schmarda and, as it is the older of the two names, would still be the correct name for this genus, even if *Pedalion* Hudson, 1871, were not an invalid homonym. In view of the considerable discussion that has taken place in regard to this question and also of the importance and interest of this genus, I think that it is important that this subject should now be closed by the name *Hexarthra* Schmarda being placed on the *Official List of Generic Names in Zoology* and the invalid name *Pedalion* Hudson, 1871, on the *Official Index of Rejected and Invalid Generic Names in Zoology*, together with the reputed, but non-existent, name *Pedalia* Barrois, 1878. It would be useful also if all other invalid uses of the name *Pedalion* subsequent to the name *Pedalion* Dillwyn, 1817 (Class Pisces) were at the same time to be relegated to the *Official Index*.

15. At this point we encounter a difficulty of quite a different order. The nominal species *Hexarthra polyptera* Schmarda, though incorrectly and inadequately described, must be regarded as belonging to the highly variable group represented by *Pedalion fennicum* Levander, 1892. Accordingly, under the Code the trivial nome *polyptera* Schmarda, 1854, being much older than *fennicum* Levander, would replace the latter name. The trivial name *fennicum* Levander is however so deeply entrenched in the literature that its replacement by the hitherto contentious name *polyptera* Schmarda would certainly give rise to confusion and would be open to strong objection. In order to prevent this confusion, I accordingly ask the International Commission on Zoological Nomenclature to use its plenary powers to suppress the trivial name *polyptera* Schmarda, thereby validating the later name *fennicum* Levander for the same species. As part of this proposal, I ask the International Commission to use the same powers to designate *Pedalion fennicum* Levander, 1892, to be the type species of *Hexarthra* Schmarda, in place of the older nominal species *Hexarthra polyptera* Schmarda, the name of which it is now proposed should be suppressed. The trivial name *fennicum* Levander, 1892 as published in the binominal combination *Pedalion fennicum* should then be placed upon the *Official List of Specific Trivial Names in Zoology*. Incidentally, it would be helpful if at the same time the International Commission were to place on this *Official List* the trivial names, each an available name and the oldest name for the species concerned, of two other well-known species of this genus. These trivial names are : (1) the trivial name *mira* Hudson, 1871 (*Mon microscop. J.* **6** : 121) (as published in the binominal combination *Pedalion mira*) ; (2) the trivial name *intermedia* Wiszniewski, 1929 (*Bull. Acad. pol. Sci. Lettr.* (Cl Sci. math. nat.) (B) **1929** (2) : 137)) (as published in the binominal combination *Pedalia intermedia*).

16. The specific proposals which I now therefore lay before the International Commission on Zoological Nomenclature are that it should :—

(1) use its plenary powers :—

(*a*) to suppress, for the purposes of the Law of Priority but not for those of the Law of Homonymy the trivial name *polyptera* Schmarda, 1854 (as published in the binominal combination *Hexarthra polyptera*) ;

(*b*) to set aside the indication, by monotypy, of *Hexarthra polyptera* Schmarda, 1854, as the type species of the genus *Hexarthra* Schmarda, 1854, and having done so, to designate *Pedalion fennicum* Levander, 1892, to be the type species of that genus ;

(2) place the generic name *Hexarthra* Schmarda, 1854 (type species, by designation, as proposed in (1) (*b*) above, under the plenary powers : *Pedalion fennicum* Levander, 1892) (gender of generic name : feminine) on the *Official List of Generic Names in Zoology* ;

(3) place the under-mentioned generic names or reputed generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :-

(*a*) *Pedalia* Barrois, 1878 (a reputed but non-existent name) ;

(*b*) *Pedalion* Swainson, 1838 (a junior homonym of *Pedalion* Dillwyn, 1817) ;

(*c*) *Pedalion* Hudson, 1871 (a junior homonym of *Pedalion* Dillwyn, 1817) ;

(*d*) *Pedalion* Buckton, 1903 (*Monogr. Membr.* **6** : 251) (a junior homonym of *Pedalion* Dillwyn, 1817) ;

(4) place the under-mentioned trivial names on the *Official List of Specific Trivial Names in Zoology* :—

(*a*) *fennicum* Levander, 1892 (as published in the binominal combination *Pedalion fennicum*) (trivial name of species proposed, under (1) (*b*) above, to be designated as the type species of *Hexarthra* Schmarda, 1854) ;

(*b*) *intermedia* Wisniewski, 1929 (as published in the binominal combination *Pedalia intermedia*) ;

(*c*) *mira* Hudson, 1871 (as published in the binominal combination *Pedalion mira*) ;

(5) place the trivial name *polyptera* Schmarda, 1854 (as published in the binominal combination *Hexarthra polyptera*) (a name proposed, under (1) (*a*) above, to be suppressed under the plenary powers) on the *Official Index of Rejected and Invalid Specific Trivial Names in Zoology*.

PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A TYPE SPECIES FOR THE GENUS "TRIGONIA" BRUGUIÈRE, 1789 (CLASS PELECYPODA, ORDER EULAMELLIBRANCHIATA)

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(Commission's reference Z.N.(S.)499)

The object of the present application is to seek the assistance of the International Commission on Zoological Nomenclature in securing, by the use of its plenary powers, that the type species of the important and well-known genus *Trigonia* Bruguière, 1789 (*Ency. méth.* (Vers) **1** : xiv) shall be a clearly identifiable species of the genus universally known by that name. It is hoped that it will be possible for the International Commission to give an early decision on the present application, since that decision is urgently required in connection with the preparation of the relevant portion of the forthcoming *Treatise on Invertebrate Paleontology.*

In order to make clear the nature of the problem involved, I set out below particulars of the way in which the name *Trigonia* was used on each of the first five occasions on which that name appeared in print :—

(1) *Original publication by Bruguière in* 1789

A short generic diagnosis was given ; no bibliographical references were given ; no nominal species was cited as belonging to the genus.

(2) *As used by Bruguière in* 1797 (*Ency. méth.* (*Vers*) **2** : *pls.* 237, 238)

The name *Trigonia* appeared at the head of the foregoing plates, on which were figured several species of what are now known as *Trigonia.* No names were cited for those species.

(3) *As used by Lamarck,* 1799 (*Mém. Soc. Hist. nat. Paris* **1799** : 86)

Lamarck gave a short diagnosis for the genus and in addition cited the following reference : " *Trigonia* . . . Encyl.t.237. Naturforsch. 15e livraison, t. iv."

At the time of the publication of the foregoing paper by Lamarck, the species figured on the plate in the *Encyclop. méth.* were still unnamed, but the second of the plates cited by Lamarck, belongs to a paper by Hermann (1781, " Brief über einige Petrefacten," *Naturforscher* **15** : 115-134, pls. 4, 5), who was an undoubtedly binominal author, which does contain binominal names for the species figured, namely :—(1) *Cardium tortuosum ;* (2) *Venus* oder *Donax sulcata ;* (3) *Venus* oder *Donax tuberculata ;* (4) *Venus* oder *Donax nodosa ;* (5) *Venus* oder *Donax dubia.*

(4) *As used by Lamarck*, 1801 (*Syst. Anim. sans Vertèbr.* : 116)

On this occasion Lamarck gave a generic diagnosis, repeated the reference to " Naturf. 15e livraison t.4," and cited without specific diagnosis one nominal species, as follows :—" *Trigonia nodulosa* n. Knorr. Foss. p.11, t.17, f.8. Encyclop. t.237, f.4."

(5) *As used by Lamarck*, 1804 (*Ann. Mus. Hist. nat. Paris* **4** : 354)

Lamarck again gave a generic diagnosis. He cited one nominal species only, the Recent *T. margaritacea* Lamarck (then named for the first time—on page 355).

As the name *Trigonia* Bruguière, 1789, was published prior to 1st January 1931, with a generic diagnosis, the fact that no nominal species was cited as belonging to this genus does not invalidate it. Accordingly this name is available as from Bruguière, 1789. In order to ascertain what nominal species is, under the *Règles*, the type species of *Trigonia* Bruguière, it is necessary to apply the rules laid down for determining the type species of a genus established without any nominal cited as belonging thereto. Until 1948, the only rules dealing with this subject were those laid down in the Commission's *Opinion* 46 (1912, *Smithson. Publ.* **2060** : 104-107). At its Session held in Paris in July 1948, the International Commission on Zoological Nomenclature, when drawing up, for submission to the International Congress of Zoology, proposals for the incorporation in the *Règles* of interpretative rulings given in previously published *Opinions*, gave special consideration to the problem dealt with in *Opinion* 46. The conclusions then reached by the Commission, which were approved by the Congress, involved both the amendment and clarification of the ruling previously given in the foregoing *Opinion*. The terms of the decision then taken have since been published in the *Official Record of the Proceedings* of the Commission at its Paris Session (1950, *Bull. zool. Nomencl.* **4** : 159-160, 346). It is therefore in the light of the foregoing decisions that the type species of *Trigonia* Bruguière must be determined.

In the first of the decisions cited above, it was provided that " where, prior to 1st January 1931, a generic name was published for a genus established (a) with an indication, definition or description, (b) with no nominal species distinctly referred to it, the first nominal species to be subsequently so referred to it by the same or another author is to be deemed to have been an originally included species and that species automatically becomes the type species of the genus in question." At the same time *Opinion* 46 was cancelled. In the later of the decisions cited above, provision was made for the case where on the first occasion on which any nominal species was subsequently referred to such a genus, two or more such species were referred, it being then provided that in such a case all the nominal species so referred to the genus in question were to be treated as originally included species and that it was from those species alone that a subsequent author, acting under Rule (g) in Article 30, could validly select a type species for the genus.

Applying the foregoing decisions to the case of *Trigonia*, we see at once that the action by Bruguière in 1797 (case (2) above) in applying the name *Trigonia* to certain unnamed species figured on plates has no bearing on the

present problem, for, as no names were applied to those species, Bruguière did not on that occasion " distinctly refer " any nominal species to this genus.

We have next to consider whether Lamarck's action in 1799 (case (3) above) has any bearing on the present problem. In this case, it will be recalled, Lamarck cited no nominal species as belonging to this genus but he did give a reference to a previously published paper in which certain nominal species were figured (by Hermann in 1781). Prior to the Paris Congress of 1948, it was held by some authors that the citation by Lamarck of Hermann's paper should be deemed to constitute the reference to the genus *Trigonia* of the nominal species figured by Hermann. Thus, in 1932 (*Amer. J. Sci.* (5) **24** : 449) Crickmay argued that the type species of this genus could be selected only from among the nominal species which (1) conformed with Bruguière's diagnosis and (2) had already been described by 1789 and that the only such species were those described by Hermann. Crickmay thereupon selected as the type species of *Trigonia* the second of the species cited by Hermann, namely " *Venus* oder *Donax sulcata* " Hermann, 1781 (*Naturforscher* **15** : 127) ; in 1936 this selection was accepted, though on slightly different grounds, by Rennie (*Ann. S. Afr. Mus.* **31** : 331-332). This species is a Jurassic species of the Costatae group of the genus now known as *Trigonia*. In view, however, of the requirement laid down by the Paris Congress in 1948, that, in order to be available for selection as the type species of a genus established without nominal species, a nominal species must have been " distinctly " referred to the genus in question by the first subsequent author to place any nominal species in the genus in question, it does not appear that Lamarck's action in citing a reference to a plate by an earlier author without himself citing any nominal species can properly be held to amount to his having " distinctly referred " to *Trigonia* the species figured by Hermann. This is a question, however, on which it would be helpful if the International Commission, when dealing with the present application, would give an express ruling in a " Declaration " under the procedure prescribed by the Paris Congress (1950, *Bull. zool. Nomencl.* **4** : 136-137).

If, as appears to be the case, Lamarck's action in 1799 did not amount to the " distinct " reference of any nominal species to the genus *Trigonia*, the next work to be considered is Lamarck's *Syst. Anim. sans Vertèbr.* of 1801 (case (4) above). On this occasion, Lamarck cited as belonging to this genus one nominal species—and one species only—namely the then new species *Trigonia nodulosa*. Accordingly, on the view advanced above, that species becomes the type species of *Trigonia* Bruguière, by monotopy. The interpretation of this nominal species rests exclusively upon the figures cited by Lamarck and does not depend upon the identity of any specimen preserved in the Lamarckian Collection. The reference given by Lamarck to Knorr is bibliographically incorrect, as Lamarck assigned his own numbers to Knorr's plates ; the plate intended by Lamarck, when he referred to " plate 17 " is apparently Knorr's plate " B.I.a". Figure 8 (the figure no. cited by Lamarck) represents a broken *Trigonia*. The species figured is however specifically indeterminable. The interpretation of the nominal species *Trigonia nodulosa* Lamarck, 1801, thus rests solely upon figure 4 on plate 237 of the *Encyclopédie méthodique.*

Unfortunately, however, it has to be noted at this point that in 1819

(*Hist. nat. Anim. sans Vertèbr.* **6**(1) : 63, 64) Lamarck identified the species figured as fig. 4 on pl. 237 of the *Encyclop. méth.* as *Trigonia aspera* Lamarck, 1819 (*loc. cit.* **6**(1) : 63) and figure 2 on the same plate as *Trigonia nodulosa* Lamarck, 1801. The same interpretations were repeated by Lamarck in explanation of pl. 237 of the *Encyclop. méth.* We have therefore the difficulty of deciding whether the " f.4 " cited by Lamarck in 1801 was a misprint (or slip of the pen) for " f.2 " or whether in 1819 Lamarck transferred the identification from the one species to the other. It may be mentioned that a specimen in the Lamarckian Collection figured by Favre (J.) in 1914 (*Cat. illustr. Coll. Lamarck* (3) : pl. 35, figs. 253a, b) as *Trigonia nodulosa* Lamarck appears to be the species represented on fig. 2 of plate 237 rather than that represented on figure 4. This does not however establish the identity of the taxonomic species represented by the nominal species *Trigonia nodulosa* Lamarck, 1801, which rests solely upon the bibliographical reference then cited. Accordingly, if we reject the suggestion that Lamarck's reference in 1801 to the *Encyclop. méth.* is a misprint (a suggestion which would require a ruling from the Commission to secure definitive acceptance), it appears that the taxonomic species represented by the nominal species (*Trigonia nodulosa* Lamarck, 1801), which is the type species of the genus *Trigonia* Bruguière by monotypy, is the species usually known as *Trigonia aspera* Lamarck, 1819, to which the name *Trigonia nodulosa* should be transferred. This species is of Jurassic age and belongs to the Clavellatae group of the genus now known as *Trigonia*.

Reviewing the position as set out above, there are, it seems to me, strong objections to the acceptance, as the type species of *Trigonia* Bruguière, of the nominal species *Trigonia nodulosa* Lamarck, 1801. I hold this view for two reasons : (1) Crickmay's (1932) selection of *Venus sulcata* Hermann, 1781, as the type species of *Trigonia* Bruguière, though (as it appears) invalid, has been accepted by later workers, having been adopted by Rennie in 1936, by Shimer & Shrock, in 1944 (*Index Fossils of N. America* : 401), and by Cox and Arkell in 1948 (" Survey of the Mollusca of the British Great Oolite Series," *Mon. pal. Soc.* : 21). The interpretation of *Venus sulcata* Hermann is not in doubt, and by the acceptance of that species as the type species of *Trigonia*, this important genus of Mesozoic fossils is clearly defined. (2) The acceptance of *Trigonia nodulosa* Lamarck as the type species of this genus would not only involve a confusing change in existing practice (including the acceptance, as the type species, of a species belonging to the Clavellatae group of the genus in place of a species belonging to the Costatae group) but would involve also the acceptance, as the type species, of a species (*Trigonia nodulosa* Lamarck) which at present is universally known by another name (*Trigonia aspera* Lamarck). In view of the importance of the genus *Trigonia* Bruguière and the confusion which, in this instance, would be involved by the strict application of the *Règles*, I consider that this is a case where it is desirable that the International Commission should use its plenary powers to designate *Venus sulcata* Hermann, 1781, as the type species of this genus, and, in order to avoid the confusing transfer of trivial names referred to above, also to suppress the trivial name *nodulosa* Lamarck, 1801 (as published in the combination *Trigonia nodulosa*). Further, in view of the fact that in 1804 Lamarck (case (5) in the second paragraph of the present application) applied the name *Trigonia* to

a recent species (*Trigonia margaritacea* Lamarck, 1804) which has since become the type species of a separate genus, *Neotrigonia* Cossmann, 1912 (*Ann. Palaeont.* **7**(2) : 81), it would be desirable for the Commission to take the present opportunity to place the name *Neotrigonia* Cossmann on the *Official List of Generic Names in Zoology* at the same time as the name *Trigonia* Bruguière, the trivial names of the type species of these genera, together with the trivial name *aspera* Lamarck, 1819 (as published in the combination *Trigonia aspera*) being simultaneously placed on the *Official List of Specific Trivial Names in Zoology* and the trivial name *nodulosa* Lamarck, 1801 (as published in the combination *Trigonia nodulosa*), as proposed to be suppressed under the plenary powers, on the *Official Index of Rejected and Invalid Specific Trivial Names in Zoology*.

There is one final point to which attention should be given ; this is in relation to the identity of the taxonomic species represented by the nominal species *Venus sulcata* Hermann, 1781. There is just the possibility that the specimens illustrated by Hermann may have belonged to two species, and it is accordingly desirable to place the identity of this species beyond doubt by selecting a lectotype under the procedure prescribed by the International Congress of Zoology when in 1948 it revised the provisions of Article 31 of the *Règles* (1950, *Bull. zool. Nomencl.* **4** : 73-76). In a paper on the classification of the family TRIGONIDAE which will be published in the *Proceedings of the Malacological Society of London* in the course of 1950, I have therefore selected figures 9 and 10 (representing the same specimen) on Hermann's plate iv to represent the lectotype of this species. This specimen is from the Upper Lias of Gundershofen, Alsace. The larger specimen said to come from Champagne, which is represented in figs. 3 and 4 of the same plate and is also referred to *Venus sulcata*, may well belong to a different species and have come from a different formation. I have selected the Gundershofen specimen in preference to that from Champagne to represent the lectotype because in the description of this species Gundershofen is the only locality mentioned and figures 9 and 10 alone are cited. As it is possible that the paper containing the foregoing lectotype selection may not be published until after the appearance of the present application in the *Bulletin of Zoological Nomenclature*, I ask the International Commission on Zoological Nomenclature to take note of the action proposed and, when placing the trivial name *sulcata* Hermann, 1781 (as published in the binominal combination *Venus sulcata*) on the *Official List of Specific Trivial Names in Zoology*, to add a note that the name so placed on the *Official List* is applicable to the species defined by the foregoing lectotype.

I accordingly recommend that, in addition to rendering a *Declaration* clarifying the position arising when, in the case of a genus established without any nominal species distinctly referred thereto, a subsequent author, without citing any such species, gives a bibliographical reference to an earlier publication containing the names of such species, the International Commission on Zoological Nomenclature should :—

(1) use its plenary powers :—

(*a*) to set aside all type designations or selections made for the genus *Trigonia* Bruguière, 1789, prior to the date of the

proposed decision, and to designate *Venus sulcata* Hermann, 1781, to be the type species of that genus ;

(*b*) to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the trivial name *nodulosa* Lamarck, 1801 (as published in the binominal combination *Trigonia nodulosa*) ;

(2) place the under-mentioned names on the *Official List of Generic Names in Zoology* :—

(*a*) *Trigonia* Bruguière, 1789 (type species, by designation under the plenary powers, as proposed under (1)(*a*) above : *Venus sulcata* Hermann, 1781) ;

(*b*) *Neotrigonia* Cossmann, 1912 (type species, by original designation : *Trigonia margaritacea* Lamarck, 1804) ;

(3) place the under-mentioned specific trivial names on the *Official List of Specific Trivial Names in Zoology* :—

(*a*) *sulcata* Hermann, 1781 (as published in the binominal comination *Venus sulcata*), as defined by its lectotype, figs. 9 and 10 (representing the same specimen) on plate iv of Hermann's *Brief über einige Petrefacten of* 1781 ;

(*b*) *margaritacea* Lamarck, 1804 (as published in the binominal combination *Trigonia margaritacea*) ;

(*c*) *aspera* Lamarck, 1819 (as published in the binominal combination *Trigonia aspera*) ;

(4) place the trivial name *nodulosa* Lamarck, 1801 (as published in the binominal combination *Trigonia nodulosa*), as proposed in (1)(*b*) above, to be suppressed under the plenary powers, on the *Official Index of Rejected and Invalid Specific Names in Zoology*.

ON THE PROPOSED VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAMES "TETTIGONIA" LINNAEUS, 1758, AND "ACRIDA" LINNAEUS, 1758, IN THE ORDER ORTHOPTERA (CLASS INSECTA)

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(Commission's reference Z.N.(S.)328)

(Letter dated 5th July 1951)

I beg leave to state my decided support of the proposals submitted by Dr. Ashley B. Gurney (1951, *Bull. zool. Nomencl.* **2** : 106-109) that the names *Tettigonia* Linnaeus, 1758, and *Acrida* Linnaeus, 1758, in the Order Orthoptera

(Class Insecta) should be validated by the International Commission on Zoological Nomenclature under its plenary powers with *Gryllus viridissimus* Linnaeus, 1758, and *Gryllus turritus* Linnaeus, 1758, as the respective type species of these genera. This action appears to be the best and almost the only way to avoid further unbearable confusion in the nomenclature of the Orthoptera.

SUGGESTED ADOPTION OF A "DECLARATION" RELATIVE TO THE NOMINAL SPECIES TO BE REGARDED AS ELIGIBLE FOR SELECTION AS THE TYPE SPECIES OF A GENUS ESTABLISHED WITHOUT CITED NOMINAL SPECIES, IN CASES WHERE A SUBSEQUENT AUTHOR WITHOUT CITING SUCH A SPECIES, GIVES A BIBLIOGRAPHICAL REFERENCE TO A WORK IN WHICH SUCH SPECIES ARE CITED

By FRANCIS HEMMING, C.M.G., C.B.E.

(*Secretary to the International Commission on Zoological Nomenclature*)

(Commission's reference Z.N.(S.)499)

1. In his application relating to the type species of the genus *Trigonia* Bruguière, 1789 (Class Pelecypoda) Dr. L. R. Cox raises the question whether, in the case of a genus established without cited nominal species, a subsequent author who, while not citing any nominal species as being referable to the genus in question, gives a bibliographical reference to a previously published work or paper in which such species are cited by name is to be treated as having so referred the species in question and therefore as having created a situation in which those nominal species alone rank as originally included species and are accordingly alone eligible for selection as the type species of the genus by a subsequent author, acting under Rule (*g*) in Article 30.

2. Up to 1948, as Dr. Cox points out, the only ruling available regarding the species to be accepted as the type species of a nominal genus established without nominal species clearly referred thereto was that given in *Opinion* 46 (first published in the year 1912). That *Opinion*, as is well known, caused great difficulty (and much controversy), when attempts were made to apply its provisions in particular cases, owing partly to the mutually contradictory character of its component provisions and partly to the fact that those provisions rested not upon objective nomenclatorial facts but upon subjective (taxonomic) criteria and were therefore incapable of securing a result which would not be open to challenge by later authors holding different subjective (taxonomic) views. Having regard to these well-known defects in *Opinion* 46, the Inter-

national Commission gave special consideration to the problem dealt with in it, when in 1948 at its Paris Session, it had under consideration the question of recommending to the International Congress of Zoology the incorporation, subject to any necessary amendments or clarifications, in the *Règles* of the interpretations of individual Articles given in *Opinions* already rendered. The terms of the conclusions reached by the Commission in this matter, which were subsequently endorsed by the Congress, are set forth in the *Official Record of Proceedings* of the Commission at its Paris Session (1950, *Bull. zool. Nomencl.* **4** : 159-160, 346).

3. The central feature of the decision referred to above is that, in the case of a nominal genus established prior to 1st January 1931 (*a*) with an indication, definition or description, (*b*) with no nominal species distinctly referred thereto, the first nominal species (whether one or more in number) to be distinctly referred to the genus by a subsequent author is, or are, to be treated as the sole originally included nominal species. Supplementary decisions flowing automatically from the foregoing decision were (1) that where only one nominal species was distinctly referred to such a genus on the first occasion on which any such species was so referred, that species automatically becomes the type species of that genus, by monotypy, and (2) that, where two or more such species were so referred, those nominal species alone are eligible for selection as the type species of the genus by some later author.

4. In the case cited by Dr. Cox, an author (Lamarck), when dealing (1799) with a genus previously established without any nominal species referred to it (*Trigonia* Bruguière, 1789), did not himself cite any nominal species as belonging to the genus in question but did give a bibliographical reference to a previously published paper (Hermann, 1781) in which nominal species had been cited. The question to be considered is whether action such as that described above creates a situation in which a nominal species has been " distinctly " referred to the genus in question. It seems to me that nothing less than the actual citation of the name of a nominal species as the name of a species belonging to the genus in question can properly be regarded as bringing a nominal species within the scope of the Paris decision, for, unless a nominal species is actually cited by name, it cannot be claimed to have been " distinctly " referred to the genus in question. I should accordingly conclude that the citation of a bibliographical reference to a book or paper containing the names of nominal species does not constitute a " distinct " reference of those species to the genus concerned.

5. Having reached this point, it is necessary to consider whether, if the foregoing is the correct interpretation of the decision taken by the Paris Congress, that decision is the one best calculated for the purpose in view. One of the great difficulties which arose in the application of *Opinion* 46 in individual cases was the constant doubt as to what species were to be regarded as originally included species. It was for the purpose of overcoming this difficulty and of providing a simple and readily applicable rule that in Paris the Commission recommended, and the Congress agreed, that, in the case of a nominal genus established without any species distinctly referred thereto, two criteria must be satisfied before any subsequent author can be accepted

as having referred a species or two or more species to the genus in question. These criteria were : (1) that the species concerned must be cited by name (*i.e.* that nominal species must be cited), (2) that those species must be " distinctly referred " to the genus in question. It would certainly be possible to relax the second of these criteria in such a way as to render it permissible to treat as having been distinctly referred to such a genus a nominal species which, although nowhere mentioned by name by the author concerned, was nevertheless so mentioned in some book or paper to which that author gave a bibliographical reference. My own feeling is that this would be a retrograde step. I hold this view for the following reasons. First, it would, I think, be a mistake, now that at last, as the result of the Paris decision, we have got a simple and easily applicable rule, to complicate that rule by admitting, as having been referred to a genus of the kind which we are considering, nominal species which were not in fact mentioned by the author and which it is only possible to infer that the author in question regarded as belonging to the genus, by reason of his having cited a bibliographical reference to a book or paper in which the names of those species appeared. In some cases, no doubt, such an inference would be fully justified, but in others the validity of such an inference might be very doubtful, for an early author—and we are concerned here almost exclusively with early authors—might easily give such a reference for the purpose of drawing attention to (say) some observation made by the author quoted without necessarily intending to refer to the genus with which he was dealing all the nominal species cited by the earlier author. Second, there is always the possibility in such cases that a bibliographical reference so given may be incorrectly cited (as Dr. Cox has shown actually happened in the case of *Trigonia* when in similar circumstances Lamarck in 1801 gave one certainly erroneous bibliographical reference and a second probably erroneous reference). Third, the books or papers to which in such circumstances bibliographical references are likely to be made will in almost every case be old books, mainly books published in the XVIIIth century ; descriptions and figures given in such books are, as is well known, often difficult to interpret and in consequence genera having as their type species originally described and/or figured in such works are frequently indeterminate or at best based upon an insecure foundation.

6. For the foregoing reasons, it seems to me that an undesirable element of instability and consequently of confusion would be introduced into nomenclature if the Paris decision in this matter were to be relaxed in such a way that a nominal species that is not cited by an author, when dealing with a genus established without any nominal species referred thereto, but is mentioned in a book or paper, to which a bibliographical reference is cited by that author were to be treated as an originally included species. Any hard case that might arise (as in the case of *Trigonia*) by the maintenance of the Paris decision could properly be dealt with under the Commission's plenary powers. Such cases would, I am convinced, be much less numerous and the problems at issue much less complicated than would be those which would arise if the reverse procedure were to be adopted. Accordingly, I would suggest that, in order to remove any doubts which may exist in regard to the present position in this matter, the International Commission on Zoological Nomenclature,

acting under the procedure prescribed in such cases by the International Congress of Zoology (1950, *Bull. zool. Nomencl.* **4** : 136-137), should render a " Declaration " stating that, in the case of a nominal genus established prior to 1st January 1931, with an indication, definition or description without citation of any nominal species, the citation by a later author in connection with the name of such a genus of a bibliographical reference to a book or paper containing the names of nominal species is not to be treated as constituting a distinct reference of the nominal species concerned to the genus in question, it being necessary for this purpose for an author explicitly to cite by name a nominal species as being referable to the genus in question.

PROPOSED USE OF THE PLENARY POWERS TO SUPPRESS THE TRIVIAL NAME " CAESIUS " CLOQUET, 1818 (AS PUBLISHED IN THE BINOMINAL COMBINATION " COLUBER CAESIUS ") (CLASS REPTILIA, ORDER SQUAMATA)

By ARTHUR LOVERIDGE

(*Museum of Comparative Zoology, Cambridge, Mass., U.S.A.*)

Commission's reference Z.N.(S.)531)

During the course of a revisionary study of the African Green snakes commonly referred to the genera *Chlorophis* Hallowell, 1857 (*Proc. Acad. nat. Sci. Philad.* **1857** : 53) and *Philothamnus* Smith, 1847 (*Ill. Zool. S. Afr.*) (Rept.) : pl. lix), I find that the trivial name (*irregularis*) of the commonest and most widely distributed member of the genus *Chlorophis* is antedated.

The trivial name *irregularis* Leach, 1819 (*in* Bowditch, *Miss. Ashanti* : 494 " Fantee, Gold Coast "), as published in the binominal combination *Coluber irregularis*, has been almost consistently applied (in combination either with the name *Ahaetulla* or the name *Chlorophis* or the name *Philothamnus*) to this common reptile since 1858 (Günther), occurring 113 times in the literature.

However, the stability of the name of this species is threatened by the trivial name *caesius* Cloquet, 1818 (*Dict. Sci. nat.*, Paris **11** : 201 " Region of Cape Verde "), as published in the binominal combination *Coluber caesius*, a name which has never been used by anyone, other than its original author Cloquet. The description of *caesius* conforms to that of *irregularis* in all respects, except that the number of its subcaudals is given as sixty-four, whereas the range for *irregularis* is from 97 to 121. I suggest that the tail of the type specimen of *caesius* was truncated, for quite a high percentage of these whip-tailed tree snakes lose the ends of their tails during life. When such a loss occurs early in life, the tail heals over and the terminal point is reproduced, so that the tail closely resembles its original condition.

In further support of the identification of *caesius* with *irregularis*, we have to note that, with the possible exception of *semivariegatus* Smith, 1847

(*Dendrophis* (*Philothamnus*) *semivariegata* Smith, 1847, *Ill. Zool. S. Afr.* (Rept.): pls. lix, lx, lxiv, figs. 1*a–b* " Bushman Flat, Cape Province ") *irregularis* is the only species of the genus which extends so far west as the region of Cape Verde, the type locality of *caesius*.

In order to avoid the quite unnecessary confusion and instability which would result from the substitution of the entirely unknown name *caesius* Cloquet for the universally accepted name *irregularis* Leach, I ask the International Commission on Zoological Nomenclature :—

(1) to use its plenary powers to suppress the trivial name *caesius* Cloquet, 1818 (as published in the binominal combination *Coluber irregularis*) for the purposes of the Law of Priority but not for those of the Law of Homonymy ;

(2) to place the under-mentioned trivial names on the *Official List of Specific Trivial Names in Zoology* :—

(*a*) *irregularis* Leach, 1819 (as published in the binominal combination *Coluber irregularis*) ;

(*b*) *semivariegata* Smith, 1847 (as published in the combination *Dendrophis* (*Philothamnus*) *semivariegata*), the type locality of the species so named to be interpreted as specified by Bogert, 1940 (*Bull. amer. Mus. nat. Hist.* **77** : 56) (trivial name of type species of *Philothamnus* Smith, 1847) ;

(3) to place the generic name *Philothamnus* Smith, 1847 (gender of generic name : masculine) (type species, by monotypy : *Dendrophis* (*Philothamnus*) *semivariegata* Smith, 1847) on the *Official List of Generic Names in Zoology* ;

(4) to place the trivial name *caesius* Cloquet, 1818 (as published in the binominal combination *Coluber caesius*), as proposed, in (1) above, to be suppressed under the plenary powers, on the *Official Index of Rejected and Invalid Specific Trivial Names in Zoology*.

ON THE PROPOSED VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAMES " RHINA " LATREILLE [1802-1803], AND " MAGDALIS " GERMAR, 1817, FOR USE RESPECTIVELY IN THEIR ACCUSTOMED SENSE (CLASS INSECTA, ORDER COLEOPTERA)

By KLAUS GÜNTHER

(*Institut für Genetik der Freien Universität Berlin, Berlin-Dahlem, Germany*)

(Commission's reference Z.N.(S.)202)

(Letter dated 5th July 1951)

In the light of the considerations set out in Commission's reference Z.N.(S.) 202, I beg the International Commission on Zoological Nomenclature to rule the generic names *Rhina* Latreille, [1802-1803] and *Magdalis* Germar, 1817, to be valid names, each to be used in its accustomed sense. The International

Commission on Zoological Nomenclature should use its plenary powers for this purpose to such extent as may be necessary. The specific proposals to which I wish to give my entire support are those submitted by Professor J. Chester Bradley (Department of Entomology, Cornell University, Ithaca, N.Y.) as given by that scholar in the *Bulletin of Zoological Nomenclature*, volume 2, Part 2, of 20th April 1951, p. 53 seq., under Points (1), (2), (3) and (4).

ON THE QUESTION WHETHER ANY TWO GENERIC NAMES OR TRIVIAL NAMES, EACH BASED UPON THE SAME SURNAME OF A PERSON, WHOSE NAME IS NORMALLY WRITTEN IN SOME ALPHABET OTHER THAN THE LATIN ALPHABET, AND EACH HAVING THE SAME TERMINATION, BUT DIFFERING FROM ONE ANOTHER IN THE TRANSLITERATION OF THE PORTION REPRESENTING THE PERSON'S NAME, ARE TO BE REGARDED AS HOMONYMS OF ONE ANOTHER

By HELEN M. MUIR-WOOD, D.Sc.

(*Department of Geology, British Museum (Natural History), London*)

(Commission's reference Z.N.(S.)530)

1. In the course of recent work it has been necessary to consider whether the generic names *Jakowleffia* Puton, 1875 (*Pet. Nouv. ent.* **1** (No. 128) : 512) (Class Insecta, Order Hemiptera) and *Yakovlevia* Fredericks, 1925 (*Rec. geol. Comm. Russian Far East* **40** : 7) (Brachiopoda) (non *Yakovlevia* Vologdin, 1931 (*Archaeocyathinae Siber.* : 36) (Archaeocyathinae)), are homonyms of one another and whether the later published of these names is invalid under Article 34 of the *Règles* and should be replaced by a new name.

2. The above names differ from one another in spelling to a greater extent than that specified in the provision inserted in Article 34 by the International Congress of Zoology in 1948 (*see* 1950, *Bull. zool. Nomencl.* **4** : 161-162) and accordingly, if no other factors were involved, these names would not be homonyms of one another. On the other hand, each of these generic names is based upon the same Russian surname and each has the same termination. It is therefore only the accident of the method of transcription from the Cyrillic alphabet used respectively by Puton in 1875 and Fredericks in 1925 that is responsible for these names not being identical with one another and therefore identical homonyms. The question thus arises whether a pair of generic names differing from one another only for the foregoing reason can properly be regarded as different names or whether they should be treated as homonyms of one another.

3. The Thirteenth International Congress of Zoology at its meeting held in Paris in 1948 agreed to include in one of the Schedules to the *Règles* rules for the transcription of words from the Cyrillic, to the Latin alphabet (1950, *Bull. zool. Nomencl.* **4** : 228-229). These rules should be useful as a means for avoiding in future incorrect transliteration of words normally written in the Cyrillic alphabet, but the value of these rules is limited by reason of the fact that they are in the nature of recommendations to authors and are not mandatory provisions. A name incorrectly transliterated into the Latin alphabet will therefore not be subject to automatic emendation. Thus, even the new Schedule described above, though helpful as far as it goes, will provide no means for dealing with the problem which arises when two names (either generic names or trivial names) are published which through differences in the form of transliteration adopted are not homonyms of one another but which would be homonyms if there existed a prescribed method for transliterating into the Latin alphabet the word of which each of the two names is composed. Although the present case arises in connection with names based upon a word which, prior to Latinisation for the purposes of Article 13, were words belonging to a language using the Cyrillic alphabet, the problem involved is a general one and is liable to arise with names based upon words of any language that uses an alphabet other than the Latin alphabet.

4. It is accordingly suggested that, in view of the large number of scientific names for animals that are based upon the surnames of persons whose names, in their own country, would be written in the Cyrillic alphabet and the need for securing uniformity in the method of transliteration adopted and of providing also means for determining whether any given pair of such names should be regarded as homonyms of one another (under Article 34 or Article 35, as the case may be), it is desirable that early consideration should be given to the question of substituting mandatory provisions relating to the transliteration of such names in place of the permissive provisions annexed to the *Règles*, as a Schedule, by Paris Congress.

5. It is recognised that the foregoing suggestion may require some time for consideration, in view of the need for devising safeguards to prevent undesired changes in the spelling of well-established names. On the other hand, such considerations do not apply to the limited question relating to the interpretation of the Law of Homonymy with which the present application is primarily concerned. There is therefore no reason why an immediate decision should not be given on that particular question. Indeed, it is very desirable that a ruling should be given as quickly as possible, in order to dispel doubts which at present must attach to the status of a name such as that of the brachiopod genus *Yakovlevia* Fredericks.

6. The International Commission on Zoological Nomenclature is accordingly requested to dispose of this question by rendering a *Declaration* containing a ruling, with reference to the Law of Homonymy (Articles 34 and 35) that, where each member of any given pair of generic names (or, if in any given genus, of any pair of trivial names, whether, on the one hand, specific or subspecific trivial names, or, on the other hand, infra-subspecific trivial names) (1) is

based upon the same surname and that surname is normally written in some alphabet other than the Latin alphabet, and (2) has the same termination and/or suffix, but the two names differ from one another in spelling only by reason of differences adopted in the transliteration of the surname comprised in the generic names (or trivial names) in question, the two generic names in question (or, as the case may be, the two trivial names in question) are to be treated as homonyms of one another.

REQUEST FOR A RULING ON THE QUESTION WHETHER ANY TWO NAMES, EACH BASED UPON A MODERN PATRONYMIC, ARE TO BE REGARDED AS HOMONYMS OF ONE ANOTHER, WHEN THE PATRONYMICS IN QUESTION ARE IDENTICAL IN SPELLING BUT DIFFER THROUGH THE PRESENCE OR ABSENCE OF AN UMLAUT OR OTHER DIACRITIC MARK

By HELEN M. MUIR-WOOD, D.Sc.

(*Department of Geology, British Museum (Natural History), London*)

(Commission's reference Z.N.(S.)538)

1. The object of the present application is to obtain from the International Commission on Zoological Nomenclature a ruling on the question whether the members of any given pair of generic names (or trivial names), each based upon a modern patronymic are to be regarded as homonyms of one another when the names in question are identical with one another except for the fact that the patronymic on which one of the names is based is distinguished by an umlaut or other diacritic mark, while the patronymic on which the other name is based is not so distinguished or is distinguished by a different diacritic mark.

2. An actual case of the above kind has arisen in the course of recent work. The particulars are as follows :—

(1) *Törnquistia* Reed, 1896

The name *Törnquistia* Reed (F.R.C.), 1896 (*Quart. J. geol. Soc. Lond.* **52** : 433) (Class Trilobita) was introduced as the name of a new subgenus of the genus *Cyphaspis* Burmeister, 1843 (Organ. Trilob. : 104). The nominal species *Cyphaspis* (*Törnquistia*) *nicholsoni*, then a new species, was designated as the type species of the new subgenus *Törnquistia* Reed. Reed referred in a footnote to Törnquist, 1884. *Undersökn. öfv Siljans. Trilobitenfauna ota Sver. geol. Undersökn, Lund.* **20** : No. 2. There is, therefore, no doubt that it was the Swedish palaeontologist Törnquist after whom the subgeneric name *Törnquistia* was given by Reed.

(2) *Tornquistia* Paeckelmann, 1930

The name *Tornquistia* Paeckelmann, 1930 (*Abh. preuss. geol. Landesanst.* (n. s.) **122** : 218, 277) was published as the name of a new genus of Brachiopoda. The nominal species *Leptaena* (*Chonetes*) *polita* McCoy, 1852 (*Ann. Mag. nat. Hist.* (2)**10**: 421) was designated as the type species of this genus.

3. Reed's trilobite genus is named after Sven Leonhard Törnquist, the Swedish palaeontologist who published papers on Lower Palaeozoic rocks and fossils of Sweden. Paeckelmann's brachiopod genus was certainly named after A. J. H. Tornquist, a German palaeontologist who published on the Lower Carboniferous of the Vosges and on the Trias and Jurassic of Germany for, although Paeckelmann did not make any specific statement as to whom he was naming his genus after, it is not to be believed that he would have named his genus after a Swedish palaeonotologist who wrote exclusively on Swedish Lower Palaeozoic rocks and fossils.

4. The only author who, so far as I am aware, has considered the relative status of the foregoing pair of names is B. K. Licharew (1934, *in* Zittel, *Grundzüge der Paläontologie* **1** (Invert.) (Russian edition), Leningrad-Moscow : 509, footnote) who took the view that, in spite of the presence of an umlaut over the " o " in the name of the trilobite genus and the absence of an umlaut over the " o " in the name of the brachiopod genus, the two generic names should be regarded as homonyms of one another for the purposes of Article 34 ; he accordingly gave the substitute name *Paeckelmannia* to the brachiopod genus *Tornquistia* Paeckelmann.

5. After carefully considering this matter, I am of the opinion that the interpretation of Article 34 by Licharew is eminently reasonable, for it would certainly be most confusing if it were permissible under the *Règles* to have, as available generic names, names which differed from one another only in the presence or absence of diacritic marks. I realise however that the difference which distinguishes such names as *Törnquistia* and *Tornquistia* is not one of the differences specified by the International Congress of Zoology (1950, *Bull. zool. Nomencl.* **4** : 161-162) as a difference to be ignored in determining whether any two given names are homonyms of one another and therefore that, as the Congress expressly stipulated that the list of differences which it enumerated is to be treated as an exhaustive list, the differences with which we are here concerned cannot, in the absence of a special ruling by the International Commission, be ignored and therefore that, without such a ruling, names such as those specified above cannot be regarded as homonyms of one another. I accordingly now ask the International Commission to clarify the position by rendering a *Declaration* which would have the effect of making names such as those discussed homonyms of one another.

6. It is important that any ruling on this subject should be drawn in terms wide enough to cover not only the case immediately under consideration but also similar but slightly different cases where considerations of the same kind apply. Thus, I should hope that the ruling would not be confined to the case

presented by scientific names based upon modern patronymics, although it is likely that it is in relation to this class of name that the present problem will most frequently arise. It might however arise in the case of scientific names based on the names of places or even upon words, other than patronymics or place names, drawn from languages other than Latin. It is desirable therefore that the ruling to be given should be so drawn as to cover all cases of this kind.

7. A somewhat similar problem arises when, for example, a name based upon a word containing a letter with (say) an umlaut over it is written not with an umlaut (as in the case of *Törnquistia*) but with an " e " inserted after the vowel concerned (as *Toernquistia*). It would be even more illogical and undesirable to accept as valid generic names both the name *Törnquistia* and *Toernquistia* than it would be to accept as such the names *Törnquistia* and *Tornquistia*. It is accordingly suggested that the ruling now to be given should cover this class of case also.

8. Finally, it is naturally essential that, whatever ruling is given in relation to generic names—the class of case with which the present application is immediately concerned—should apply equally to trivial names.

9. I accordingly ask the International Commission on Zoological Nomenclature to render a Declaration containing a ruling that, for the purposes of the Law of Homonymy in relation both to generic names (Article 34) and to trivial names (Article 35), (1) the presence or absence of a diacritic mark over one or more of the letters in a scientific name derived from a word belonging to some language other than Latin is to be ignored in determining whether that name is a homonym of some other name, and (2) that, where in the formation of a name, the presence of a diacritic mark over one of the letters in the word on which that name is based is indicated not by a diacritic mark but by the insertion of an additional vowel after the letter concerned, the name so transliterated is to be treated as a homonym of any other name based upon the same word and transliterated with a diacritic mark over the vowel in question.

ON AN AMBIGUITY IN ARTICLE 20 OF THE " RÈGLES " BROUGHT TO LIGHT BY DR. HELEN MUIR-WOOD'S APPLICATION FOR A RULING ON THE QUESTION OF WHETHER NAMES BASED ON WORDS CONTAINING LETTERS HAVING A DIACRITIC MARK ARE TO BE REGARDED AS HOMONYMS WHEN ONE MEMBER OF A PAIR OF SUCH NAMES IS PRINTED WITH A DIACRITIC MARK AND IN THE OTHER AN ADDITIONAL VOWEL IS USED TO INDICATE WHERE THE DIACRITIC MARK APPEARED IN THE WORD ON WHICH THE NAME IS BASED : PROPOSED ADOPTION OF A " DECLARATION "

By FRANCIS HEMMING, C.M.G., C.B.E.

(*Secretary to the International Commission on Zoological Nomenclature*)

(Commission's reference Z.N.(S.)540)

1. In the concluding portion of her application to the International Commission on Zoological Nomenclature for a ruling on the question whether such

generic names as *Törnquistia* Reed, 1896 (a name given in honour of the Swedish palaeontologist Leonhard Törnquist) and *Tornquistia* Paeckelmann, 1930 (a name given in honour of the German palaeontologist A. J. H. Tornquist) are to be regarded as homonyms of one another (File Z.N.(S.)538) Dr. Helen Muir Wood raises the further question whether a generic (or trivial) name based upon a word containing a letter distinguished by a diacritic mark is to be regarded as a homonym of another generic name based upon the same word in which however the diacritic mark which appeared in the original word is reproduced in the generic or trivial name concerned by the insertion of an additional vowel.

2. Dr. Muir-Wood's second question, which is, in effect, whether, for example, if there were two generic names, each given for a zoologist named Hübner and for one of which the form of latinisation adopted under Article 3 led to the formation of a generic name *Hübneria* and for the other a generic name *Huebneria* the two names so formed are to be treated as homonyms of one another, is one on which there can, it seems to me, be no room for difference of opinion, since the use of a modified "u" on the one hand and the vowels " ue " on the other hand represent no more than different methods of transcribing a letter which did not appear in the Latin alphabet, when (as in forming a scientific name) it is necessary to Latinise such a word. It is evident, therefore, that two generic names such as those cited above are in every sense identical with one another. It follows automatically therefore that such names are homonyms of one another for the purposes of zoological nomenclature. Nevertheless, Dr. Muir-Wood's request for a ruling on this question is to be welcomed, for the provision of an answer to the question which she has raised will eliminate from the *Règles* an ambiguity which is undesirable in itself and one which is particularly unwelcome to those zoologists who hold that questions involving issues on etymological, grammatical or similar matters should arise as seldom as possible in the *Règles*.

3. The purpose of the present note is to suggest that, when the International Commission on Zoological Nomenclature proceeds to consider Dr. Muir-Wood's application, it should consider also the relation of that application to the existing Article 20 in the *Règles*. That Article reads (in the substantive French text) : " Pour la formation de noms empruntés aux langues s'écrivant avec l'alphabet latin, on conserve l'orthographe originale, y compris les signes diacritiques ". Among the examples there given are the generic names *Köllikeria* and *Mülleria*. The above provision, which forms part of the original text of the *Règles* as adopted by the Fifth International Congress of Zoology at Berlin in 1901, was supplemented in 1907 (by a decision by the Seventh International Congress of Zoology, Boston, 1907) by the addition of a " Recommendation " (adopted in English and for which no substantive French text was ever prepared), which reads as follows :—" In proposing new names based on personal names, which are written sometimes with " ä ", " ö " or " ü ", at other times with " ae ", " oe " and " ue ", it is recommended that authors adopt " ae " " oe " and " ue." Apart from the value of the advice given, this " Recommendation " serves a useful purpose in making it clear that the sole subject matter of Articles 20 is the preservation of the distinction between such patronymics as

" Müller " and " Muller " and in consequence between generic names based upon such patronymics (e.g., *Mülleria* and *Mulleria*) and not with the method to be adopted in transliterating diacritic signs when a word, one of the letters of which has a diacritic mark above it, is latinised, on the word in question being used as part of a scientific name. We see therefore that, what Article 20 says is, in effect, that, where (for example) a generic name is given in honour of a man named " Müller ", the diacritic mark over the second letter of the man's name is to be preserved, on the latinisation of the word, and that the resulting generic name is not to take the form " Muller ". The mandatory portion of Article 20 contains no provisions at all as to the method to be adopted in preserving the diacritic mark, when such a patronymic as " Müller " is latinised on being embodied in a generic name. The Boston " Recommendation " of 1907 does, however, give advice on this subject, favouring the use of a second vowel rather than the perpetuation of the actual diacritic mark itself.

4. The Thirteenth International Congress of Zoology at Paris in 1948 adopted a provision requiring, *inter alia*, that breaches of the provisions of Article 20 are automatically to be corrected by later authors (1950, *Bull. zool. Nomencl.* **4** : 67-68). The suggestion now submitted is that, when taking a decision on the allied proposals submitted by Dr. Muir-Wood, the International Commission in Zoological Nomenclature should also give a ruling (through the adoption of a *Declaration*) that the breaches which are automatically to be corrected relate only to cases where (as in the case of a generic name based on the name " Müller " but published as *Mulleria*) a diacritic mark which appeared in the patronymic on which a name is based is incorrectly omitted altogether on the latinisation of the name for the purpose of forming a generic name. It would be helpful also if at the same time it were to be made clear in express terms that Article 20 does not prescribe any particular method of reproducing a diacritic mark, on a word containing a letter with such a mark above it being Latinised, this being a matter on which authors publishing new names are free to use their discretion, though (as agreed upon by the Boston Congress) they are advised, when Latinising a word containing a letter with an umlaut above it , to indicate that diacritic mark by inserting the letter " e " immediately after the vowel which, prior to the word being Latinised, was surmounted by an umlaut. The automatic correction prescribed by the Paris Congress does not, therefore, apply as between one method of indicating a diacritic mark and another, being concerned only to secure that, where, on a word being Latinised, a diacritic mark is improperly omitted, it shall automatically be restored by later authors.

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